**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2022-0469; Project Identifier MCAI-2021-00124-Q]**

**RIN 2120-AA64**

# Airworthiness Directives; Cameron Balloons Ltd. Burner Assemblies

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to adopt a new airworthiness directive (AD) for certain Cameron Balloons Ltd. (Cameron) Stratus double burner assemblies installed on hot air balloons. This proposed AD was prompted by reports from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI identifies the unsafe condition as fatigue cracking of the weld on Stratus double burner hangers. This proposed AD would require repetitively inspecting certain Stratus double burner hangers and replacing certain Stratus double burners, and would prohibit installing certain parts. The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

• Federal eRulemaking Portal: Go to https://www.regulations.gov. Follow the instructions for submitting comments.

• Fax: (202) 493-2251.

• Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

• Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Cameron Balloons Ltd., St Johns Street, Bedminster, Bristol, BS3 4NH, United Kingdom; phone: +44 0 117 9637216; email: technical@cameronballoons.co.uk; website: https://www.cameronballoons.co.uk. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

**Examining the AD Docket**

You may examine the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2022-0469; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the MCAI, any comments received, and other information. The street address for Docket Operations is listed above.

**FOR FURTHER INFORMATION CONTACT:** Mike Kiesov, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4144; email: mike.kiesov@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2022-0469; Project Identifier MCAI-2021-00124-Q” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to https://www.regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

**Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Mike Kiesov, Aviation Safety Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, MO 64106. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

**Background**

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2021-0042, dated January 29, 2021 (referred to after this as "the MCAI"), to address an unsafe condition on all hot air balloons. The MCAI states:

> An occurrence was been reported of a Stratus burner hanger, [part number] P/N CB8504, failing after landing, leaving one burner unit detached from the load frame. Investigation revealed a limited number of similar failures. Comparable issues have been experienced with other parts of the Stratus product line (see Australian [Civil Aviation Safety Authority] CASA AWB 14-001 [Airworthiness Bulletin AWB 14-001, Issue 3, dated February 5, 2021]). The suspected cause is fatigue cracking of the weld, caused mainly during ground transportation with the burner erect, combined with an overload event.

> This condition, if not detected and corrected, could lead to burner falling on the balloon occupant's head, resulting in injury to balloon occupants. It could also lead to an uncontrolled cold descent and hard landing, possibly resulting in injury to balloon occupants and persons on the ground.
>
> To address this potential unsafe condition, Cameron Balloons issued the SB [Service Bulletin No. 28, Revision 3, dated February 3, 2021], providing inspection and replacement instructions. It was determined that some burner hangers cannot be inspected as they are covered with a doubler plate to reinforce the central part of the hanger bracket.
>
> For the reasons described above, this [EASA] AD requires repetitive detailed inspections (DET) of the affected parts A and, depending on findings, replacement with a serviceable part. This [EASA] AD also requires direct replacement of the burner hanger installed on affected parts B.

You may view the MCAI in the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2022-0469.

**Related Service Information under 1 CFR Part 51**

The FAA reviewed Cameron Balloons Service Bulletin 28, Revision 3, dated February 3, 2021. The service information specifies identifying the Stratus double burner hanger, inspecting it in accordance with Cameron Balloons SB28: Accomplishment Instructions CBL/TN/DCB/3191, Issue B, dated February 4, 2020 (CBL/TN/DCB/3191 Issue B), and replacing it if there are any cracks.

The FAA also reviewed CBL/TN/DCB/3191 Issue B, which contains procedures for identifying and inspecting affected Stratus double burner hangers.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

**FAA's Determination**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the agency of the unsafe condition described in the MCAI and service information referenced above. The FAA is issuing

this NPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

**Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in the service information already described, except as discussed under "Differences Between this Proposed AD and the MCAI."

**Differences Between this Proposed AD and the MCAI**

The MCAI requires reporting information to Cameron Balloons, and this proposed AD would not.

**Costs of Compliance**

The FAA estimates that this AD, if adopted as proposed, would affect 220 burner assemblies that have been produced worldwide. The FAA has no way of knowing how many of these burner assemblies are installed on hot air balloons of U.S. Registry. Therefore, for the purposes of this proposed AD, the FAA is basing the fleet cost estimate on the maximum number of 220 burner assemblies.

The FAA estimates the following costs to comply with this proposed AD:

**Estimated costs**

| Action | Labor Cost | Parts Cost | Cost per hot air balloon | Cost on U.S. operators |
|---|---|---|---|---|
| Inspect burner hangers | 1 work-hour x $85 per hour = $85 | Not applicable | $85 per inspection cycle | $18,700 per inspection cycle |

The FAA estimates the following costs to replace a cracked burner hanger or a burner that has a doubler plate. The FAA has no way of determining the number of hot air balloons that would need this action.

**On-condition costs**

| Action | Labor Cost | Parts Cost | Cost per hot air balloon |
|---|---|---|---|
| Replace with a serviceable part | 1 work-hour x $85 per hour = $85 | $250 | $335 |

**Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

**Regulatory Findings**

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

(1) Would not be a "significant regulatory action" under Executive Order 12866,

(2) Would not affect intrastate aviation in Alaska, and

(3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive: **Cameron Balloons Ltd.:** Docket No. FAA-2022-0469; Project Identifier MCAI-2021-00124-Q.

**(a) Comments Due Date**

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

(1) This AD applies to hot air balloons, certificated in any category, with a Cameron Balloons Ltd. Stratus double burner assembly part number (P/N) CB8720 or P/N CB8721 installed.

(2) The affected burner assemblies may be installed on hot air balloon models including, but not limited to, those of the following design approval holders:

(i) Aerostar International, Inc.;

(ii) Ballonbau Worner GmbH;

(iii) Balóny Kubíček spol. s.r.o.;

(iv) Cameron Balloons Ltd.;

(v) Eagle Balloons Corp.;

(vi) JR Aerosports, Ltd (type certificate previously held by Sundance Balloons (US));

(vii) Lindstrand Balloons Ltd.; and

(viii) Michael D. McGrath (type certificate subsequently transferred to Andrew Philip Richardson, Adams Aerostats LLC).

**(d) Subject**

Joint Aircraft System Component (JASC) Code 7100, Powerplant System.

**(e) Unsafe Condition**

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as suspected fatigue cracking of the weld on affected burner hangers. The FAA is issuing this AD to prevent burners from separating from the balloon. The unsafe condition, if not addressed, could result in an uncontrolled cold descent and hard landing of the balloon.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Definitions**

(1) For purposes of this AD, an "affected part A" is a Stratus double burner hanger P/N CB8504, Issue A, Issue B, or Issue C, except those installed on a Stratus double burner P/N CB8720 or P/N CB8721 with a doubler plate reinforcing the central part of the hanger bracket, as shown in figure 2 of Cameron Balloons Service Bulletin 28, Revision 3, dated February 3, 2021 (Cameron Balloons SB28 R3).

(2) For purposes of this AD, an "affected part B" is a Stratus double burner P/N CB8720 or P/N CB8721 with a doubler plate reinforcing the central part of the hanger bracket, as shown in figure 2 of Cameron Balloons SB28 R3.

(3) For purposes of this AD, a "serviceable part" is a Stratus double burner hanger P/N CB8504, Issue D or later.

**(h) Actions**

(1) Within 10 hours time-in-service (TIS) or 30 days, whichever occurs first after the effective date of this AD, inspect the weld of each affected part A for cracks in accordance with paragraphs 3.1.2 through 3.1.4 and Figure 6 of Cameron Balloons SB28: Accomplishment Instructions CBL/TN/DCB/3191, Issue B, dated February 4, 2020.

(i) If there are no cracks, repeat the inspection in paragraph (h)(1) of this AD at intervals not to exceed 12 months.

(ii) If there is a crack, before further flight, remove the affected part A from service and install a serviceable part. Installation of a serviceable part on a Stratus double

burner assembly constitutes terminating action for the repetitive inspections required by paragraph (h)(1) of this AD for that Stratus double burner assembly.

(2) Within 30 days or 10 hours TIS, whichever occurs first after the effective date of this AD, remove each affected part B from service and install a serviceable part.

(3) As of the effective date of this AD, do not install on any hot air balloon an affected part A.

(4) As of the effective date of this AD, do not install on any hot air balloon an affected part B, unless it is equipped with a serviceable part.

**(i) Credit for Previous Actions**

You may take credit for the initial inspection required by paragraph (h)(1) of this AD if you performed the inspection before the effective date of this AD using Cameron Balloons Service Bulletin 28, Revision 2, dated March 4, 2020; or Revision 3, dated February 3, 2021.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (k)(1) of this AD and email to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(k) Related Information**

(1) For more information about this AD, contact Mike Kiesov, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4144; email: mike.kiesov@faa.gov.

(2) Refer to European Union Aviation Safety Agency (EASA) AD 2021-0042, dated January 29, 2021, for more information. You may view the EASA AD at https://www.regulations.gov in Docket No. FAA-2022-0469.

(3) For service information identified in this AD, contact Cameron Balloons Ltd., St. Johns Street, Bedminster, Bristol, BS3 4NH, United Kingdom; phone: +44 0 117 9637216; email: technical@cameronballoons.co.uk; website: https://www.cameronballoons.co.uk. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

Issued on April 22, 2022.

Derek Morgan, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.
[FR Doc. 2022-09077 Filed: 5/4/2022 8:45 am; Publication Date: 5/5/2022]